

We claim:

1. A method of bending a laminated material comprising:
while fixing one end of a laminated material having a first surface plate and a second surface plate respectively fixed to both sides of a core material on a base, moving and bending the other end of said first surface plate toward the direction separating from said core material;

applying an adhesive to either one of the contact surfaces between said first surface plate and said core material at said other end; and

moving and bending said other end of said core material and said second surface plate along said first surface plate being bent, and adhering said core material to said second plate.

2. A method of bending a laminated material according to claim 1, wherein the application of said adhesive is performed by spraying said adhesive toward the area between said first surface plate and said core material.

3. A method of bending a laminated material according to claim 2, wherein the application of said adhesive is performed to said first surface plate.

4. A method of bending a laminated material according to claim 2, wherein the means for spraying said adhesive performs

said spraying while moving from one end of said first surface plate in the width direction toward the other end thereof.

5. A method of bending a laminated material according to claim 1, wherein the bending of said first surface plate is performed by sucking said other end by a base positioned at said other end, and moving said base on said other end.

6. A method of bending a laminated material according to claim 1 including:

mounting said laminated material to a base or bases positioned along the horizontal direction; and

thereafter, fixing said one end of said laminated material.

7. A method of bending a laminated material according to claim 6, wherein the bending of said first surface plate is performed by sucking said other end downward by the base positioned at said other end; and

moving said base on said other end downward.

8. A method of bending a laminated material according to claim 1, wherein the bending of said first surface plate is performed by fixing said other end to an arc-shaped base; and

after fixing said one end to the base, rotating said base on said other end.

9. A method of bending a laminated material according to claim 1, wherein the bending of said core material and said second surface plate is performed by moving a roller from said one end thereof toward the other end, and at the same time, moving said roller toward said first surface plate.

10. A method of bending a laminated material according to claim 9, wherein the fixing of said one end of said first surface plate to said base during the bending of said first surface plate is performed by pressing said laminated material onto said base by said roller.

11. A method of bending a laminated material comprising:
while fixing one end of a first surface plate, moving the other end of said first surface plate and bending it into an arc-shape;

applying an adhesive to either one of the contact surfaces between said first surface plate and said core material at said other end; and

while fixing the one end of the core material and a second surface plate adhered to said core material to the one end of said first surface plate, moving and bending the other end of said core material and said second surface plate along said first surface plate being bent, and adhering said core material to said second plate.

12. A method of bending a laminated material comprising:
while fixing one end of a first surface plate, moving the
other end of said first surface plate and bending it into an
arc-shape; and

while fixing the one end of the core material and a second
surface plate adhered to said core material to the one end of
said first surface plate, moving and bending the other end of
said core material and said second surface plate along said
first surface plate being bent, and adhering said core material
to said second plate.

13. A method of bending a laminated material comprising:
while fixing one end of a first surface plate, moving the
other end of said first surface plate and bending it into an
arc-shape; and

while fixing the one end of the core material and a second
surface plate adhered to said core material to the one end of
said first surface plate, moving and bending the other end of
said core material and said second surface plate along said
first surface plate being bent, crushing the first-
surface-plate side portion of said core material in the
direction of the bend, and adhering said core material to said
first surface plate.

14. A method of bending a laminated material comprising:

while fixing one end of a first surface plate, moving the other end of said first surface plate and bending it into an arc-shape; and

while fixing the one end of the core material and a second surface plate adhered to said core material to the one end of said first surface plate, moving and bending the other end of said core material and said second surface plate along said first surface plate being bent, crushing the first-surface-plate side portion of said core material and a foam member filling the cell of said core material in the direction of the bend, and adhering said core material to said first surface plate.

15. A laminated material comprising:

a core material, and two surface plates bonded to both outside surfaces thereof; wherein

said core material includes a plate positioned substantially orthogonal to said surface plates and bonding said two surface plates together;

at least a portion of said laminated material has an arc-shaped curve with one surface positioned inward; and

said core material at said arc-shaped area has the inward portion crushed in the direction of the arc.

16. A laminated material according to claim 15, wherein:
a foam material is filled to the plurality of cells of said

core material; and

the foam material filled in the cells positioned in the first-surface-plate side of the arc-shaped area is crushed.

17. A laminated material comprising:

a core material, and two surface plates bonded to both outside surfaces thereof; wherein

substantially the whole surface of one surface of said core material is adhered to one of said surface plates;

one end of the other surface of said core material is adhered to one end of the other of said surface plate; and

the other end of said other surface of said core material is not adhered to the other end of said other surface plate.

18. A laminated material according to claim 17, wherein the end portion of said other end of said other surface plate is positioned closer to said one end than the end portion of said other end of said core material.

19. A laminated material according to claim 17, wherein said core material includes a plate positioned substantially orthogonal to said surface plates and bonding said two surface plates together, with cells positioned parallel to said plate; and

said cells are filled with foam material.

20. A laminated material according to claim 17, wherein a face material is adhered to the surface of one of said surface plates.

21. A bending device of a laminated material comprising:
a substantially horizontal first base for mounting a laminated material;

a first suction pad mounted on the upper surface of said first base;

a second base for mounting a laminated material together with said first base equipped with an arc-shaped portion, wherein the arc-shaped portion faces upward when said second base is rotated while said laminated material is mounted thereto;

a second suction pad mounted on said second base to the position where said laminated material is to be mounted; and

a roller capable of moving toward the second base and also capable of moving in the direction of rotation of said second base.

22. A bending device of a laminated material according to claim 21, wherein said second base is equipped with a third suction pad for sucking the lower surface of a substantially horizontal laminated material when said second base is rotated.

23. A bending device of a laminated material according

to claim 21, wherein a third base is further equipped on the other side of said second base centering said first base;

said third base is equipped with a suction pad positioned on the upper surface thereof;

said third base is capable of rotating upward; and

a cutting position is set between said third base and said second base, with a cutting device positioned above said cutting area.

24. A bending device of a laminated material according to claim 22, wherein said second base is capable of moving relatively against said first base and said third base.

25. A bending device of a laminated material according to claim 24, wherein said relative movement of said second base is in the horizontal direction.

26. A bending device of a laminated material according to claim 24, wherein said relative movement of said second base is in the vertical direction.